VCGI Quarterly Operational Overview
For the Board of Directors of the
Vermont Center for Geographic Information, Inc.
September 2013 (FY 2014)

Funded Projects

Vermont Agency of Transportation:

VCGI provides technical assistance to VTrans in the form of GIS support services, RFP development, and other technical support services that enhance Agency and State objectives. VTrans discontinued this contract with VCGI in August.

Vermont Emergency Management, Homeland Security and Dept. of Public Safety:

VCGI continues to provide project design and emergency data support to VEM/HS and the Dept. of Public Safety for their operations. Ivan Brown is the designated support individual for VCGI to VEM data and the Public Safety community.

Ivan Brown continues to spend time in support of the Public Safety sector. As these organizations are maturing their GIS capacity in a significant and meaningful way VCGI will continue to support them as needed. As a result, the ED continues to make the case the contract value amount should be increased and suggested that both organizations should contribute to the cost.

Accomplishments include:

- DPS's Virtual Vermont Infrastructure Now Connected to the Web – VCGI completed an installation and configuration of GIS software on DPS's Virtual Vermont GIS infrastructure. This work, along with network configuration that was conducted by DPS staff, made it possible to securely serve and receive GIS data over the web.

- Critical Facilities Data Collection – VCGI fostered collaboration among stakeholders of critical facilities data to advance the effort of establishing a modern data collection system for efficient and secure collection of high quality critical facility data. A web map editor, named the Critical Facilities Data Collector, has been rolled out from DPS's Virtual Vermont GIS infrastructure as a tool for the RPCs and others to conduct edits to the data. DEMHS, E911, the RPCs, and the Health Department are very active with this project.

- GIS in the SEOC – VCGI provided GIS staff to the SEOC on June 28, 2013 for an activation that was due to a potential major flood event.

- Blocking Weather Pattern of June-July – VCGI produced a map which depicts the progression of the blocking weather pattern event of June-July for support of a request for

a presidential declaration.

Going Forward:

- Local Road Closure Data Collection – Given that feedback from the Critical Facilities Data Collector has been very positive, the project plan for Critical Facilities Data Collection should be considered as a template project plan for solving the problem of collecting and disseminating local road closure information. DEMHS is working on the workflow of reporting local road closures. VCGI will be ready to take an approach to a local roads information solution that is similar to the approach that has been taken with critical facilities.

- SEOC-GIS File Server – Although a file server is a simple quintessential resource in GIS systems, the SEOC continues to lack a much needed GIS file server. The SEOC-GIS file server would provide storage, organization, and easy execution of certain types of GIS work files in the SEOC. The server would also allow collaboration of work among SEOC-GIS partners, which include VTrans, the Health Department, and RPCs. Contract Value: $30,000

VT Homeland Security Unit:
This grant was completed in May, 2013. In the past three months VCGI has supported VEM-HSU in completion of a federal audit for this project. All information has been supplied and there are no known outstanding issues. Contract Value: $150,000

VT E-911 Board:
VCGI has a Service Level Agreement with E-911 for VCGI to host web services using ArcGIS server for E911. VCGI has agreed to provide support for these services through normal business hours. Services are also provided to E911 on a developmental platform for evaluation and testing. Yearly value $12-$15,000

VT Dept. of Agriculture:
VCGI is working with personnel at the VT Dept. of Agriculture to help them develop their internal GIS data and services organization and capacity. The Dept. of Agriculture has hired a GIS Technician to establish and mature their internal GIS capabilities. This technician has been interacting with VCGI on statewide data and project initiatives. This change is a welcome development and it looks promising for Ag to be more active in geospatial coordination activities.

VT Sustainable Jobs Fund:
VCGI is working with the VT Sustainable Jobs Fund to define, access, collect and organize their geospatial information in support of their alternative energy development goals. A new MOU was signed by VSJF enabling them to engage VCGI to upgrade the data and data models used in the Sustainable Energy website. Mike Brouillette is the project manager for this project. VSJF management is also discussing using available LiDAR in the state to do local solar siting evaluations on a large scale. MOU Value:

$40,000 (Estimated)

NTIA State Broadband Initiative (SBI) Grant Updates:

The VT Broadband Mapping Team continues to maintain the BroadbandVT.org (www.broadbandvt.org) website. The contract is coming in to the final year of the grant. While there are still issues that need attention for every delivery the processes in place have stabilized.

NTIA performed a review of the Match for the project. There were no issues found and both VCGI and NTIA are considered to be in agreement on Match.

A review of the expenditures of the sub-contractors showed that two sub-contractors were under spending their budget significantly. Those sub-contractors were the Dept. of Public Service and UVM, Center for Rural Studies. VCGI has renegotiated the sub-contract with the UVM, Center for Rural Studies. The Department of Public Service has taken on a new contractor and as a result their sub-contract value will not be changed.

BroadbandVT.org website was recently updated and the latest mapping data has been added to the site.

VCGI has negotiated an additional task for Pericle to provide a second and final statewide drive test of fixed and mobile wireless coverage. Pericle performed the previous drive test and they have remained on contract to provide updated availability models for new fixed wireless and to perform this final drive test. The intention is to perform the drive test in the same manner and with the same specifications as the 2010 drive test in order to collect comparable data..

Connect Vermont has hired Stone Environmental to create maps and statistics based upon the SBI data to show the availability of broadband in the state. Total SBI Grant Value: $3,542,996

Core Activities

Staff

There have been no significant staff changes this quarter.

Board of Directors:

Leslie Morrissey has retired from her position at UVM and resigned her seat on the Board. Jarlath O'Neill-Dunne from the UVM Spatial Analysis Lab has submitted his name to the Governor for consideration, replacing Leslie in that seat.

FY 14 Legislative Activities:

No legislative activities during this past quarter.

Public Record Request:

VCGI received a public record request for the broadband data collected as part of the NTIA grant. The staff has been reviewing data files and redacting data elements that are considered by the NTIA and the providers to be proprietary. Specifically, data or information that;

(a) identifies the type and technical specification of infrastructure owned, leased, or used by a specific broadband service provider;

(b) identifies the average revenue per user (ARPU) for a specific broadband service provider; or

(c) explicitly identifies a broadband service provider at a specific Service Location, defined as the specific geographic point or location at which a service provider offers broadband service, such as a specific residence or business.

Providing this information requires a significant effort given the limited resources of the organization.

Imagery Data Program:

The statewide orthophoto imagery is made available free to the RPCs, and Towns in uncompressed format. The public has access to the same data in compressed format through our free data download capability and anyone may purchase the data in uncompressed format on a hard drive at very reasonable prices.

Color and infrared ortho imagery was successfully acquired in the Spring of 2013 over Chittenden, Grand Isle, Lamoille, Franklin and Washington county areas. Preliminary reviews of four pilot tiles of the data showed issues with image quality and were rejected twice. In early September, Fugro was able to resolve the image quality issues and provide acceptable images for the same four images.

VCGI has an agreement with Chittenden County (through Pam Brangan) and Dept of Homeland Security (through Lin Neifert – USGS) to perform buy-ups over the Chittenden and Barre-Montpelier areas in the spring of 2013. Chittenden was collected at 15cm GSD and Barre-Montpelier was collected at 30cm. The statewide .5m imagery collection is the first priority for the state and the Chittenden County and Homeland Security data collection will wait for the statewide .5m data to be delivered for QC before this imagery will be processed.

Delivery schedules for the data have been extended, but the need to extend appears to be over. Final delivery of the statewide .5m coverage is expected in late Fall. Final delivery of the Chittenden and Barre-Montpelier areas should occur in early winter.

Enterprise Geospatial Consortium Activities:

VCGI continues to provide coordinating support to state agency related Enterprise GIS activities. In the past quarter the EGC has pursued the following strategic activities;

The EGC is currently working on a Data Warehouse Redesign. In order to get community feedback on the priorities for the redesign the Workgroup performed a public survey. The survey asked the user to rank design priorities according to a 100 point scale.

The EGC Warehouse Workgroup conducted a "competitive analysis" to review "data portals" similar to what the Workgroup is trying to design and build. The goal was to evaluate what the "competition" is doing, determine what stakeholder needs the competition is addressing, and, as part of such analysis, gather ideas (design, layout, and functionality) which the Workgroup could potentially integrate into VT's new geodata portal.

The Workgroup discussed the Open Data Pilot being implemented by DII. DII is doing an "open data" pilot using Socrata Open Data Portal software. The EGC recognizes this represents an opportunity for the Workgroup to participate in this pilot for the purposes of providing geospatial data that is accessible, discoverable and utilizes Socrata's mapping module. DII is willing to add 4-5 geodatasets to the pilot. The EGC is considering recommendations for datasets.

VCGI continues to consult with the EGC on what data and services would be most useful to the enterprise. We will do whatever our budget will allow to support the enterprise.

Strategic Planning:

At the June Board of Director's meeting the Board requested the ED prepare a Business Plan for the organization. That document has been prepared and is provided for first review and discussion at the September Board meeting.

New Proposals:

VCGI has submitted a proposal to the Northern Border Region Commission. This project proposes to increase the parcel data infrastructure in the northern border region in four ways:

1. Provide educational opportunities to all towns in the region so that they can learn about the importance of parcel data and best practices for hiring a contractor to create or update parcel data so that it meets or exceeds the recently created VT GIS Parcel Data Standard.
2. Provide funds to towns that apply and are chosen to receive them in order to mitigate the cost of the initial creation of parcel data or in order to bring their existing data up to the level of the state standard. These funds would be paid to mapping consultants.
3. Provide direct technical support to towns that are chosen to receive funds to guide them through the process of developing specifications, drafting a request for proposals (RFP), reviewing proposals, and drafting a contract.

4. Provide direct technical support to towns that are chosen to receive funds to help them develop a sustainable maintenance plan for their parcel data, whether on an annual or less frequent basis.

This project will achieve concrete objectives, but will also support the ongoing **sustainability** of the parcel data created, because the participating towns will increase their internal capacity to deal with parcel updates, and will develop plans for how those updates will be funded.

Partners:

Each Regional Planning Commission has at least one staff member who serves as a GIS specialist/planner. This mapping expert will serve as technical support to the municipalities who participate in this project. The Outreach Coordinator at the VT Center for Geographic Information will serve as project manager and education lead. The RPC GIS Specialists and VCGI's Outreach Coordinator will also work together as a steering committee.

- Vermont Center for Geographic Information (VCGI)
- Northwest Regional Planning Commission (NRPC)
- Northeast Vermont Development Association (NVDA)
- Lamoille County Planning Commission (LCPC)

Total proposed value of the grant will be up to $338,000 with half contributed from participating towns and half from the NBRC. The final amount will depend upon the ability of towns in the northern border region to participate. The grant will run over a two year period with over 97% of the funding to be provided to private sector businesses through an RFP process managed by each town with VCGI and RPC support.

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NTIA State Broadband Initiative Grant Overview

VCGI, as prime contractor representing the larger team from VT, was awarded Broadband Mapping Grant by NTIA for 3.5M over 5 years. The original award was for 5 years, but only the first 2 years were funded. Subsequent to the first award, in late September 2010, NTIA awarded additional funding for years 3 thru 5 as an Amendment to the existing grant. VCGI's partners in this grant are the VT Telecommunications Authority, UVM- Center for Rural Studies, VT Dept. of Public Service and VT E911. There is also a significant role for private sector contractors. The full grant covers broadband telecommunications data collection, verification, and display for federal fiscal years 2010 thru 2014.

- VCGI awarded the wireless voice and data propagation mapping and verification contract to a team lead by Pericle Communications Inc.
- VCGI awarded the contract for the development of a BroadbandVT.org Website to a Team lead by Applied Geographics.
- VCGI awarded the contract for marketing support for the project to Marketing Partners.

- The last full delivery of Broadband data, with limited verification, was provided to NTIA in mid-November, 2010. Provider coverage data is being compiled and integrated by VCGI with support from DPS and the Providers themselves.
- DPS, VTA and VCGI have each hired a full time employee, with benefits, to support the State Broadband Data and Development grant activities. The latest data and information relating to the NTIA Broadband Mapping Grant is available at;
http://www.vcgi.org/projects/bmi/
- When the Team was awarded the Amendment in September 2010, all of the proposed initiatives were accepted at the requested funding level with the exception of the e-Vermont School Modernization Initiative which was not funded at all.

The initiatives that were funded thru the Amendment are as follows;

1. Data Collection, Integration, Verification, and Display – Vermont's Broadband Mapping Initiative (BMI) is a collaborative broadband data collection and verification effort involving partners from the public, private and academic sectors. The Team will collect broadband availability data from the Providers and from public sources. Broadband availability data will be verified by drive testing, field checking, public surveys (offline and online), and through interaction with the providers. Data and broadband related information will be made available through the BroadbandVT.org website. The requested amount for this effort is $1,562,000.

2. Broadband Capacity Building – The Vermont Telecommunications Authority will create a position for a Director of Broadband Coordination and Outreach. The Director will act as a liaison between Providers and government and the bodies they serve to instill the broadband vision, preserve its consistency and create an atmosphere of common mission. The liaison will be a bridge between state offices and regional planning agencies to convey information in both directions about infrastructure, aggregation, adoption and policy efforts. The proposed Director will accelerate opportunities to achieve the outcomes set forth in the VT Telecommunications Plan. The requested amount for this effort is $531,900.

3. Regional Broadband Planning - Vermont's participating Regional Planning Commissions (RPCs) will develop a network of contacts in communities and local sectors to assess where promising opportunities are available to develop broadband adoption and/or access. Regional Technology Planning Teams will be formed to plan and realize these opportunities. Through these partnerships, groups will have new opportunities to access various technical assistance programs available for others. The Regional Technology Plan will offer the State and other groups a plan for rolling out broadband technologies at the local and regional levels. The requested amount for this effort is $250,034.